

MCAQ Compliance Inspection Checklist – Boilers

Industry Overview: Boilers are typically closed vessels in which water or other fluids are heated under pressure. The fluid is then circulated out of the boiler for use in various processes or heating applications. Fuel types such as natural gas, fuel oil, coal, wood waste and kerosene are combusted by boilers resulting in a large potential for particulate, sulfur dioxide, and nitrogen oxides emissions. Boiler firing problems and/or non-ideal fuel characteristics can result in increased emissions. Accordingly, inspections should involve an evaluation of fuel quality and the exterior integrity of boiler.

Pollutants of concern: TSP, PM-10, PM-2.5, CO, VOC, SO₂, NO_x, HAPs, TAPs

Note: Refer to Specific Conditions and Limitations in the permit for additional inspection checkpoints

| Inspection Points | Inspected? | | Results and Comments |
|---|------------|----|----------------------|
| | Yes | No | |
| A. VE Observation | | | |
| 1. Check for stack visible emissions. Perform Method 9 analysis if necessary. | | | |
| B. Fuel Characteristics | | | |
| 1. Verify fuel types used. | | | |
| 2. Check fuel analyses. | | | |
| 3. Check fuel firing records. | | | |
| C. Boiler | | | |
| 1. Verify boiler load rating. | | | |
| 2. Check exterior integrity of boiler (e.g. rust, holes). | | | |
| D. Control Equipment | | | |
| 1. Check for concurrent operation of control equipment and boiler firing. | | | |
| 2. Check monitoring equipment. | | | |
| 3. Check pressure drop. | | | |
| 4. Check inlet gas temperature (if required by permit). | | | |
| 5. Check for dust collection/containment system. | | | |
| 6. Verify stack parameters comply with modeled limits - if applicable. | | | |
| E. Records Review | | | |
| 1. Check required monitoring, inspection and maintenance records. | | | |

Notes:

Name / Date